

# OTAY CROSSINGS COMMERCE PARK

APPENDIX F  
BIOLOGICAL RESOURCES REPORTS  
to the  
DRAFT SUPPLEMENTAL  
ENVIRONMENTAL IMPACT REPORT

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**OTAY CROSSINGS COMMERCE PARK**

**OFF-SITE BIOLOGICAL OPEN SPACE  
AT THE MARTZ CONSERVATION PARCEL  
RESOURCE MANAGEMENT PLAN  
SPA 04-006, TM5405RPL4**

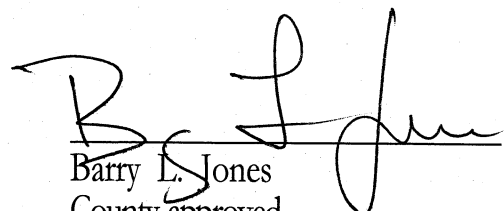
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# Otay Crossings Commerce Park Off-site Biological Open Space at the Martz Conservation Parcel Resource Management Plan

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## **LIST OF ABBREVIATIONS**

|              |  |
|--------------|--|
| AMSL         | above mean sea level                   |
| BOS          | Biological Open Space                  |
| Cal-IPC      | California Invasive Plant Inventory    |
| CDFG         | California Department of Fish and Game |
| CNPS         | California Native Plant Society        |
| County       | County of San Diego                    |
| DPLU         | Department of Planning and Land Use    |
| EOMSP        | East Otay Mesa Specific Plan           |
| HELIX        | HELIX Environmental Planning, Inc.     |
| Martz parcel | Martz Conservation Parcel              |
| MOU          | Memorandum of Understanding            |
| MSCP         | Multiple Species Conservation Program  |
| PAR          | Property Analysis Record               |
| QCB          | Quino checkerspot butterfly            |
| RMP          | Resource Management Plan               |
| RMWD         | Ramona Municipal Water District        |
| SR           | State Route                            |
| TM           | Tentative Map                          |
| USFWS        | U.S. Fish and Wildlife Service         |

## 1.0 INTRODUCTION

This Resource Management Plan (RMP) has been prepared for the proposed Otay Crossings Commerce Park Off-site Biological Open Space (BOS) preserve within the 63-acre Martz Conservation Parcel (Martz parcel) in accordance with mitigation requirements identified in the biological technical report (HELIX Environmental Planning, Inc. [HELIX] 2010). This RMP provides direction for the permanent preservation and management of the 63-acre Martz parcel in accordance with County of San Diego (County) regulations.

### 1.1 PURPOSE OF RESOURCE MANAGEMENT PLAN

The purpose of this RMP is to provide guidance to ensure preservation of existing native habitats and long-term management of the BOS. This RMP:

1. Guides management of vegetation communities and habitats, plant and animal species, cultural resources, and programs described herein to protect and, where appropriate, enhance biological and cultural resources;
2. Serves as a descriptive inventory of vegetation communities and plant and animal species that occur within the BOS;
3. Establishes the baseline conditions from which adaptive management will be determined and success will be measured; and
4. Provides an overview of the operation, maintenance, administrative, and personnel requirements to implement management goals, and serves as a budget planning aid.

The Otay Crossings Commerce Park project site is a Tentative Map (TM) and Preliminary Grading Plan (Tract 5405) for land designated for Mixed Industrial, Rural Residential, and State Route ([SR]; i.e., SR 11) use in Subarea 2 of the East Otay Mesa Specific Plan (EOMSP). The TM would subdivide the 311.5-acre property into 56 industrial lots, with the potential SR 11 alignment and Port of Entry occurring on portions of 2 lots and biological open space easements over portions of 5 lots. Biological open space at the Martz parcel will consist of a total of 63 acres, 40 of which will be used by the Otay Crossings Commerce Park project and the remaining 23 acres will be available for mitigation for other projects.

Project-related direct impacts to vegetation communities include: 0.97 acre of tamarisk scrub, 0.1 acre of native grassland, 2.0 acres of Diegan coastal sage scrub (including disturbed), 263.3 acres of non-native grassland, 1.0 acre of eucalyptus woodland, 0.7 acre of agricultural land, 20.8 acres of disturbed habitat, and 5.7 acres of developed land. Indirect impacts associated with construction activities and edge effects also would occur.

Impacts to 72 individual San Diego barrel cacti (*Ferocactus viridescens*), 138 individual San Diego marsh-elder (*Iva hayesiana*), 44 individual San Diego sunflower (*Viguiera laciniata*), and 15 individual small-flowered morning glory (*Convolvulus simulans*) would occur upon project implementation.

Four (4) burrowing owl (*Athene cunicularia*) locations would be directly or indirectly impacted, as well as 2 locations where Quino checkerspot butterfly (*Euphydryas editha quino*; QCB) were observed during 2001 focused surveys. The project would also impact habitat occupied by

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Riverside fairy shrimp (*Streptocephalus woottoni*), San Diego fairy shrimp (*Branchinecta sandiegonensis*), western spadefoot (*Spea hammondi*), coastal western whiptail (*Cnemidophorus tigris multiscutatus*), California horned lark (*Eremophila alpestris*), loggerhead shrike (*Lanius ludovicianus*), grasshopper sparrow (*Ammodramus savannarum*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), and golden eagle (*Aquila chrysaetos*).

Preservation of 40 acres on the Martz parcel, plus 47.4 acres on the Otay Crossings Commerce Park project site, 82 acres on Lonestar Ridge, and 84 acres at O'Neal Canyon, will permanently protect a total of 253.4 acres of habitat supporting numerous sensitive species. If the Otay Crossings project moves forward ahead of other projects in the area with overlapping impacts and mitigation requirements, an additional 9.2 acres of the Lonestar Ridge parcel and 3.7 acres of the Martz parcel would be acquired for mitigation.

### **1.1.1 Conditions and/or Mitigation Measures that Require an RMP**

This RMP satisfies County requirements for public review of the project pursuant to the California Environmental Quality Act and conditions that will be part of the Resolution of Approval. Project conditions requiring an RMP include mitigation for impacts to Diegan coastal sage scrub, non-native grassland, sensitive plants (San Diego barrel cactus and San Diego marsh-elder), and sensitive animals (burrowing owl, QCB, Riverside fairy shrimp, San Diego fairy shrimp, California horned lark, grasshopper sparrow, loggerhead shrike, northern harrier, white-tailed kite, golden eagle, western spadefoot, and coastal western whiptail).

### **1.1.2 Agency Review and Coordination**

A copy of the final RMP will be submitted to the U.S Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) for approval.

## **1.2 IMPLEMENTATION**

### **1.2.1 Responsible Parties**

The project applicant will contract with a qualified entity to serve as Resource Manager. The USFWS, CDFG, County Department of Planning and Land Use (DPLU), and project applicant will jointly approve the selection of a Resource Manager, who must be an established conservancy group or land manager, County Department of Parks and Recreation, County Department of Public Works, a federal or state wildlife agency, or a federal land manager. Additionally, the Resource Manager must possess the following qualifications:

- Ability to carry out habitat monitoring or mitigation activities;
- Fiscal stability, including preparation of an operational budget (using an appropriate analysis technique) for the management of this RMP;
- Resource managers must have at least 1 staff member with a biological, ecological, or wildlife management degree;
- Resource managers must have a cultural resource professional on staff or a memorandum of understanding with a cultural consultant; and
- Experience with habitat management in southern California.

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All BOS and/or conservation easements must be recorded and fee title of all BOS must be transferred to the Resource Manager. Management responsibility for Martz parcel will begin upon recordation of the easement.

### **1.2.2 Financial Responsibility/Mechanism**

The project applicant is responsible for all RMP funding requirements, including direct funds to support the RMP start-up tasks as well as either an on-going funding source, or a 1-time non-wasting endowment, which is tied to the property to fund long-term RMP implementation. Currently it is anticipated that long-term management funding will be provided through annual assessments of the Property Owners Association or similar vehicle. Start-up tasks include data base compilation and fence installation along the eastern property boundary adjacent to Rangeland Road. Long-term tasks involve the management and maintenance of the preserve in perpetuity, including habitat monitoring and mapping, exotic species control, and general monitoring and reporting. These habitat management tasks commence immediately upon recordation of BOS easement.

### **1.2.3 Cost Estimate/Budget**

A Property Analysis Record (PAR) and cost estimate will be prepared for the 63-acre Martz parcel when a Resource Manager has been identified.

### **1.2.4 Reporting Requirements**

An annual letter report will be submitted to the USFWS, CDFG, and County that will summarize the previous year's management and monitoring as well as that anticipated for the upcoming year. The report will provide a summary of methods employed, identify new management issues, and address the success or failure of previous management approaches based on monitoring. It shall include a summary of the overall condition of vegetation communities and sensitive species in the BOS, assess any changes from the baseline or from the previous year's conditions, and address any monitoring and management limitations. All adaptive management (changes) resulting from previous monitoring results and methods for measuring the success for such adaptive management will be discussed.

The results of all updated vegetation mapping and sensitive plant and animal surveys should be included in the annual letter reports.

### **1.2.5 Memorandum of Understanding**

The County requires a Memorandum of Understanding (MOU) with the project applicant, County, and Resource Manager to be provided upon County acceptance of this RMP. The MOU will state that the applicant agrees to implement the RMP, which includes a financing mechanism that provides perpetual funding that is adequate to pay the costs of all RMP management activities. The MOU shall provide a mechanism of the funds to transfer to the County in the event of failure of the Resource Manager to meet the goals outlined in this RMP. The MOU shall also provide that all RMP funding has been provided or that the funding mechanism has been established prior to the approval of grading or improvement plans, or prior to approval of the Parcel/Final Map, whichever is first.

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## **2.0 PROPERTY DESCRIPTION**

### **2.1 LEGAL DESCRIPTION**

The Martz parcel is located in an unincorporated portion of the County in the community of Ramona in the inland mountain area of northern San Diego County (Figure 1). The parcel is north of Highland Valley Road and west of Rangeland Road. It occupies unsectioned lands within Township 13 South, Range 1 West of the U.S. Geological Survey 7.5-minute San Pasqual quadrangle (Figure 2). The BOS consists of the following Assessor's Parcel Number: 277-050-32 (Figure 3).

### **2.2 GEOGRAPHICAL SETTING**

The site is located in the Ramona grasslands area just north of Santa Maria Creek, in the western portion of Pamo Valley. It is bounded by existing conserved lands to south, east and west, and by Ramona Municipal Water District (RMWD) lands to the north (Figure 3). Starvation Mountain lies to the west and Mount Woodson to the southwest. Elevations range from approximately 1,341 feet above mean sea level (AMSL) to approximately 1,365 feet AMSL. Access to the site is via Rangeland Road, which parallels the eastern boundary of the parcel.

The parcel is located within the Draft North County Multiple Species Conservation Plan (MSCP) Subarea Plan. Once adopted, the North County MSCP Subarea Plan will provide a regional conservation planning framework for the unincorporated portions of northwestern San Diego County.

### **2.3 LAND USE**

The site is used primarily for grazing cattle and has also been subject to agricultural practices (disking and irrigation). There are no existing structures on site. Surrounding land uses include RMWD sewage treatment ponds and open space to the north, and existing conserved lands to the east, west, and south. Lands to the south include a segment of Santa Maria Creek.

### **2.4 GEOLOGY, SOILS, CLIMATE, AND HYDROLOGY**

The parcel is located in the Peninsular Range Geomorphic Province of southern California. Six (6) soil types are mapped on site: Bonsall sandy loam, Bosanko clay, Fallbrook sandy loam, Fallbrook rocky sandy loam, Las Posas sandy loam, and Vista coarse sandy loam (Bowman 1973). Bosanko clay occurs on the flatter portions of the site and is the dominant soil type mapped. The various sandy loams occur on the gently sloping hills in the northeast corner and west-central portions of the site. The parcel also supports numerous small to large rock outcrops.

The climate in San Diego County is generally mild and arid. Temperatures in Ramona are generally highest in August (mean high temperature is 91°F) and lowest in December (mean low temperature is 37°F). Average annual precipitation in Ramona is approximately 16.43 inches, with the highest average rainfall totals occurring in January, February, and March (3.40 inches, 3.42 inches, and 3.56 inches, respectively). The driest months are June, July, and August with approximately 0.08, 0.12, and 0.20 inch of rainfall per month, respectively (Weather.com 2008).

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The site is located in the Ramona Hydrologic Subarea of the Santa Maria Valley Hydrologic Area, which is within the San Dieguito Hydrologic Unit/watershed. Overall site drainage is to the south toward Santa Maria Creek, which flows northwesterly past the Martz Parcel toward San Pasqual Valley. No stream channels occur on site.

## 2.5 TRAILS

No trails are located within the BOS and no trails are proposed.

## 2.6 EASEMENTS OR RIGHTS

No easements issued to others exist within or across the property.

## 2.7 FIRE HISTORY

The rate of fires in San Diego County coastal shrublands generally increased over the last half of the 20<sup>th</sup> century. Over 600 fires have occurred in the foothills and mountains of San Diego County between 1910 and 1999, and several major fires in excess of 50,000 acres have occurred in recent years. The 2007 Witch Creek fire burned lands near the parcel and may have burned a portion of the BOS. The parcel did not burn in the 2003 Cedar Fire.

# 3.0 BIOLOGICAL RESOURCES DESCRIPTION

## 3.1 VEGETATION COMMUNITIES

Two vegetation communities occur within the BOS: vernal pool and non-native grassland (Table 1; Figure 4).

| <b>Table 1<br/>VEGETATION COMMUNITIES<br/>WITHIN THE MARTZ PARCEL</b> |                            |
|---|----------------------------|
| <b>Vegetation Community/Habitat</b>                                   | <b>Acre(s)<sup>†</sup></b> |
| Vernal pool (44320)   | 0.27                       |
| Non-native grassland (42220)  | 62.7                       |
| <b>TOTAL</b>  | <b>63.0</b>                |

\*Vegetation categories and numerical codes are from Holland (1986) and Oberbauer (2008)

<sup>†</sup>Wetland habitats are rounded to the nearest 0.01 acre and upland habitats are rounded to the nearest 0.1 acre; thus, totals reflect rounding

### **3.1.1 Vernal Pools**

Vernal pools, a highly specialized habitat supporting a unique flora and fauna, are associated with two important physical conditions: a subsurface claypan or hardpan that inhibits the downward percolation of water and topography characterized by a series of low hummocks (mima mounds) and depressions (vernal pools). These two physical conditions allow water to collect in the depressions during the rainy season, which gradually evaporates. As water evaporates, a gradient of low soil water availability to high soil water availability is created from the periphery of the pool margins to the center of the pool. The chemical composition of the remaining pool water becomes more concentrated as water evaporates, creating a gradient of low ion concentration at the pool periphery to high ion concentration at the pool center. A temporal succession of plant species occurs at the receding pool margins, depending on physical and chemical microenvironmental pool characteristics. Vernal pools in a wet year will have a high proportion of native species endemic to this habitat. During these years, exotic ruderal species characteristic of non-native grasslands that occur on the surrounding mima mounds will not invade these pools, as they are unable to tolerate the physiological conditions. In years of scarce rainfall insufficient to saturate the soil and create a surface pool, native endemic flora will not germinate, and the pool will be invaded by exotic species.

A total of 3 vernal pools were mapped on site, representing approximately 0.27 acre. Vernal pool watersheds cover approximately 15.5 acres on site, which includes a portion of the watershed for an off-site vernal pool located between the parcel and Santa Maria Creek. The vernal pools were mapped by Mooney and Associates as part of the proposed Oak County Estates Property Draft Environmental Impact Report of November 2003 (Envira 2006).

The vernal pools on site support species such as woolly marbles (*Psilocarphus brevissimus*), grass poly (*Lythrum hyssopifolia*), water starwort (*Callitriche* sp.), adobe popcornflower (*Plagiobothrys acanthocarpus*), curly dock (*Rumex crispus*), water pygmyweed (*Crassula aquatica*), annual hairgrass (*Deschampsia danthonioides*), mariposa rush (*Juncus dubius*), spike-rush (*Eleocharis macrostachya*), and purslane speedwell (*Veronica peregrina*). Although vernal pools on site have been degraded by past agricultural activities and cattle grazing, they continue to support a variety of native plant species, in addition the federally listed endangered San Diego fairy shrimp.

### **3.1.2 Non-native Grassland**

Non-native grassland areas may have supported native grassland in the past, but have been overrun by exotic, introduced annuals. The flora of non-native grasslands includes a dense to sparse cover of introduced grasses and often numerous species of showy-flowered, native, annual forbs (Holland 1986). Characteristic species of the non-native grassland within the Martz parcel include oats (*Avena* spp.), red brome (*Bromus madritensis* ssp. *rubens*), ripgut (*Bromus diandrus*), rancher's fiddleneck (*Amsinckia menziesii*), shortpod mustard (*Hirschfeldia incana*), Bermuda grass (*Cynodon dactylon*), ryegrass (*Elymus* sp.), purple needlegrass (*Nassella pulchra*), and graceful tarplant (*Holocarpha virgata* ssp. *elongata*). Approximately 62.7 acres of non-native grassland occur within the Martz parcel.

## 3.2 PLANT SPECIES

### 3.2.1 Plant Species Present and Correlation with Habitat On Site

An inventory of plant species occurring on the parcel will be conducted as part of the baseline survey following recordation of the easement. The most common species observed in the vernal pool and grassland communities during previous surveys are listed in Sections 3.1.1 and 3.1.2, respectively (Envira 2006).

### 3.2.2 Rare, Threatened, or Endangered Plant Species Present or Likely to Occur

One (1) sensitive plant species was observed during biological surveys within the BOS: graceful tarplant (*Holocarpha virgata* ssp. *elongata*). This species is considered sensitive by the California Native Plant Society (CNPS) and County. It is further discussed below and its extent on site is depicted on Figure 4. A list of sensitive plant species with potential to occur within the BOS is provided in Appendix A.

#### **Graceful tarplant (*Holocarpha virgata* ssp. *elongata*)**

**Listing:** --/--; CNPS List 4.2; CA Endemic; County Group D

**Distribution:** San Diego, Orange, and Riverside counties

**Habitat:** Coastal mesas and foothills with grassland habitats

**Status on site:** Species was observed within an 8.5-acre area within the parcel. A count of individual plants was not completed and would be expected to vary from year to year.

**MSCP Management Requirements:** Area specific management directives have not been established for this species.

### 3.2.3 Non-native and/or Invasive Plant Species

Several non-native grasses and forbs occur within the BOS, including oats, red brome, ripgut grass, Bermuda grass, and shortpod mustard.

## 3.3 WILDLIFE SPECIES

### 3.3.1 Wildlife Species Present and Correlation with Habitat on Site

An inventory of animal species occurring on the parcel will be conducted as part of the baseline survey following acceptance of the property, as well as being continually updated during successive surveys. Some species that could be expected to occur on site include side-blotched lizard (*Uta stansburiana*), western fence lizard (*Sceloporus occidentalis*), gopher snake (*Pituophis catenifer*), white-tailed kite (*Elanus leucurus*), northern harrier (*Circus cyaneus*), American kestrel (*Falco sparverius*), mourning dove (*Zenaida macroura*), American crow (*Corvus brachyrhynchos*), common raven (*Corvus corax*), Say's phoebe (*Sayornis saya*), savannah sparrow (*Passerculus sandwichensis*), western meadowlark (*Sturnella neglecta*), and California ground squirrel (*Spermophilus beecheyi*).

### 3.3.2 Rare, Threatened, or Endangered Wildlife

A total of 9 sensitive animal species have been observed/detected within the Martz parcel, including 2 federally listed endangered species: San Diego fairy shrimp and Stephens' kangaroo rat, which is also state listed as threatened. Of the other 7 animal species observed/detected, 5 are listed as a State Species of Special Concern: western spadefoot, sharp-shinned hawk (*Accipiter striatus*), ferruginous hawk (*Buteo regalis*), San Diego horned lark, and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). The remaining 2 species are County sensitive: western bluebird (*Sialia mexicana*) and turkey vulture (*Cathartes aura*). These species are discussed below in order of crustaceans, amphibians, birds, and mammals and then alphabetically by scientific name. A list of potentially occurring sensitive animal species is included in Appendix B. An explanation of status codes for both plant and animal species sensitivity status is presented in Appendix C.

#### **Crustaceans**

##### **San Diego fairy shrimp (*Branchinecta sandiegonensis*)**

**Listing:** FE/--; MSCP NE; County Group 1

**Distribution:** San Diego County

**Habitat:** Seasonal pools that occur in tectonic swales or earth slump basins and other areas of shallow and standing water, often in patches of grassland and agriculture interspersed in coastal sage scrub and chaparral

**Status on site:** Observed in 3 vernal pools on site

**MSCP Management Requirements:** Area specific management directives must include specific measures to protect against detrimental edge effects to this species.

#### **Amphibians**

##### **Western spadefoot (*Spea hammondi*)**

**Listing:** --/SSC; County Group 2

**Distribution:** Throughout the Central Valley and San Francisco Bay area south along the coast to northwestern Baja California

**Habitat:** Occurs in open coastal sage scrub, chaparral, and grassland, along sandy or gravelly washes, floodplains, alluvial fans, or playas. Requires temporary pools for breeding and friable soils for burrowing. Generally excluded from areas with bullfrogs (*Rana catesbiana*) or crayfish (*Procambarus* sp.).

**Status on site:** Undetermined, but likely uses upland areas for foraging, as well as vernal pools for breeding.

**MSCP Management Requirements:** Area specific management directives have not been established for this species

## Birds

### Sharp-shinned hawk (*Accipiter striatus*)

**Status:** --/SSC; County Group 1

**Distribution:** In San Diego County, has widespread distribution but occurs in small numbers and only during winter

**Habitat(s):** Usually observed in areas with tall trees or other vegetative cover but can be observed in a variety of habitats

**Status on site:** Observed in non-native grassland

**MSCP Management Requirements:** Area specific management directives have not been established for this species

### Ferruginous hawk (*Buteo regalis*)

**Status:** --/SSC; MSCP Covered; County Group 1

**Distribution:** Uncommon winter visitor to San Diego County, usually in fall and winter

**Habitat(s):** Open grassland

**Status on site:** Observed in non-native grassland

**MSCP Management Requirements:** Additional conservation of grassland habitats should be a priority and 1 of the primary factors in the design of preserves in the major amendment areas.

### Turkey vulture (*Cathartes aura*)

**Status:** --/--; County Group 1

**Distribution:** Observed throughout San Diego County with the exception of extreme coastal San Diego where development is heaviest

**Habitat(s):** Foraging habitat includes most open habitats with breeding occurring in crevices among boulders

**Status on site:** Observed over non-native grassland

**MSCP Management Requirements:** Area specific management directives have not been established for this species

### California horned lark (*Eremophila alpestris actia*)

**Listing:** --/SSC; County Group 2

**Distribution:** Coastal slopes and lowlands from Sonoma County to northern Baja

**Habitat:** Sandy beaches, agricultural fields, grassland, and open areas

**Status on site:** Observed in non-native grassland

**MSCP Management Requirements:** Area specific management directives have not been established for this species

### Western bluebird (*Sialia mexicana*)

**Status:** --/--; MSCP Covered; County Group 2

**Distribution:** Occurs throughout much of San Diego County, but concentrated in foothills and mountains

**Habitat(s):** Montane coniferous and oak woodlands

**Status on site:** Observed in non-native grassland

**MSCP Management Requirements:** Persistence of this species in San Diego County depends largely on conservation of existing large populations on public lands east of the plan area.

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## Mammals

### **Stephens' kangaroo rat (*Dipodomys stephensi*)**

**Listing:** FE/ST; County Group 1

**Distribution:** San Jacinto Valley and adjacent areas of western Riverside County as well as San Bernardino and northwestern San Diego counties.

**Habitat:** Sparsely vegetated habitats of sagebrush or annual grasses.

**Status on site:** Approximately 10.3 acres of occupied habitat occur within onsite grassland

**MSCP Management Requirements:** Area specific management directives have not been established for this species

### **San Diego black-tailed jackrabbit (*Lepus californicus bennettii*)**

**Listing:** --/SSC; County Group 2

**Distribution:** Southern Santa Barbara County, south on the coastal slope to the vicinity of San Quintin, Baja California, Mexico. Localities on the eastern edge of its range include Jacumba and San Felipe Valley in San Diego County.

**Habitat:** Occurs primarily in open habitats including coastal sage scrub, chaparral, grasslands, croplands, and open, disturbed areas if there is at least some shrub cover present.

**Status on site:** Observed in non-native grassland

**MSCP Management Requirements:** Area specific management directives have not been established for this species

### **3.3.3 Non-native and/or Invasive Wildlife**

An inventory of non-native and/or invasive wildlife will be compiled during the baseline survey once the property has been accepted, and will be updated during regular maintenance and monitoring surveys.

## **3.4 OVERALL BIOLOGICAL AND CONSERVATION VALUE**

Conservation of the 63-acre Martz parcel provides high-value connectivity to existing preserved habitat in Ramona, as well as preserving sensitive plant and animal species and vernal pool habitat. The parcel supports approximately 0.27 acre of vernal pool habitat and 62.7 acres of non-native grassland. Sensitive species documented within the parcel include graceful tarplant, San Diego fairy shrimp, Stephens' kangaroo rat, western spadefoot, sharp-shinned hawk, ferruginous hawk, San Diego horned lark, San Diego black-tailed jackrabbit, western bluebird, and turkey vulture. The parcel also has the potential to support numerous other sensitive species, including southern tarplant (*Centromadia parryi* ssp. *australis*), little mouselink (*Myosurus minimus* ssp. *apus*), burrowing owl, and arroyo toad (*Bufo californicus*).

As previously discussed, the parcel is bounded by existing conserved lands to south, east and west, and by RMWD lands to the north. It is located in the Ramona grasslands just north of Santa Maria Creek. The Ramona grasslands are a regionally important conservation area, supporting a variety of sensitive resources, including vernal pools and rare vernal pool species, Stephens' kangaroo rat, wintering and breeding raptors, arroyo toad, riparian habitats, and native grasslands. The Santa Maria Creek riparian corridor is a high habitat value area that supports species such as arroyo toad that also use adjacent upland habitats. Preservation of the parcel

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would conserve 63 acres of high habitat value land within the Ramona grasslands and adjacent to the Santa Maria Creek riparian corridor, as well as conserving habitat for numerous sensitive species documented on site.

### **3.5 ENHANCEMENT AND RESTORATION OPPORTUNITIES**

Enhancement/restoration efforts are intended to maintain and/or increase the populations of sensitive species on site. The parcel currently supports habitat occupied by Stephens' kangaroo rat and could be used as a potential receptor site for burrowing owls. The following measures may be incorporated at the discretion of the Resource Manager to enhance the habitat for these species and to increase native plant cover:

- Long-term weed management/grassland enhancement. This may include weeding and de-thatching, selective grazing, and controlled burns.
- Seeding with native grasses and annuals in an attempt to overwhelm the non-native grasses with native species.
- Based on a site specific assessment, natural rubble piles, artificial burrows, and ground squirrel augmentation will be considered for establishment of burrowing owls on site.

## **4.0 CULTURAL RESOURCES DESCRIPTION**

### **4.1 ARCHAEOLOGICAL RESOURCES**

An inventory of cultural resources was not available for the BOS.

### **4.2 NATIVE AMERICAN CONSULTATION**

A consultation has not taken place but will be initiated by the Resource Manager following acceptance of the property.

### **4.3 HISTORICAL RESOURCES**

The BOS does not support any known structures.

## **5.0 MANAGEMENT ELEMENTS AND GOALS**

### **5.1 BIOLOGICAL ELEMENT**

#### **5.1.1 Goals**

The ultimate goal of this RMP is to detail the methods to preserve and maintain the long-term viability and the functions and values of native habitats within the preserve along with the listed and sensitive species they support. In addition, this RMP establishes the following goals with regard to biological resources:

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**Vegetation Communities:** To preserve 63 acres of high conservation value habitat in perpetuity. The habitat will be monitored for: (1) quality, (2) exotic plant control measures will be implemented to prevent or reduce the spread of weeds, and (3) adaptive management will be conducted if necessary following fire or flood events.

**Sensitive Species:** To ensure the continued existence of all sensitive plant and animal species and/or to facilitate expansion of sensitive plant and animal species within the open space.

### **5.1.2 Tasks**

The BOS will be visually inspected for changes during bi-monthly (every other month) maintenance and monitoring visits, and all observations will be documented. Any substantial changes will be monitored more closely to determine the necessity of additional measures. Such visits shall include the monitoring of the spread of exotic plant species and accumulation of trash/debris. Fences and signs associated BOS also will be inspected and any necessary repairs noted.

### **Baseline Biological Inventory**

The quantity and quality of vegetation communities within the BOS will be documented during the first year of active management. The baseline inventory will also include the compilation of plant species list (correlated with habitat) and animal species observed/detected. These data will allow the Resource Manager to measure habitat changes caused by natural and human effects and to evaluate management efforts during subsequent years.

Upon implementation of this RMP, the Resource Manager will be provided digital files containing the existing vegetation and sensitive resources data, which will be updated following the baseline inventory field survey during the start-up (first year) phase of the RMP. The intent of this update is to document current conditions in the open space areas (including graphic and tabular depictions of habitat acreages), document all species observed (either directly or indirectly by sign such as scat, tracks, etc.) within each identified habitat type, and document the locations of any sensitive plant and animal species.

The baseline inventory update will be conducted during the first year of active management. The Resource Manager will optimize the probability of detecting sensitive species reported or expected to occur within the BOS by conducting surveys during appropriate times of year.

### **Update Biological Mapping**

Vegetation and sensitive species mapping will be updated every 5 years following implementation of this RMP. A site visit should be conducted using updated aerial photography to determine vegetation communities present at the time of the survey. Any observed/detected sensitive species will be added to the biological resources maps of the parcel.

### **Sensitive Species Monitoring**

Preservation of sensitive plant and animal populations within the BOS is 1 step in achieving the overall long-term conservation of these species. Monitoring of sensitive species is another step

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in achieving the overall long-term conservation of these species. Sensitive species monitoring will help the Resource Manager identify long- and short-term threats and recommend any necessary protective measures. Sensitive plant and animal monitoring will occur during regular management activities, and the locations of any observed/detected sensitive species will be documented and added to the biological resources maps. Adaptive management measures may be required to intervene when either natural or man-made disturbances or effects appear to be adversely influencing a sensitive species.

It is the responsibility of the Habitat Biologist to evaluate the status of preserved species within the preserve and to institute protective measures if any individual species becomes threatened. Sensitive species population monitoring will vary based on the target species. In each assessment, the Habitat Biologist will observe and document sensitive species locations and conditions. Monitoring/reporting efforts will include all sensitive species previously documented within the BOS.

### Rare Plant Surveys

A rare plant survey will be conducted 2 of every 5 years throughout the BOS during the appropriate survey period for sensitive plant species observed within the BOS, which at this time only consists of graceful tarplant (Table 2). The Habitat Biologist will decide in which years the surveys will be conducted, with the goal of surveying during average or above-average rainfall years. Surveys for graceful tarplant will document the extent of the population on site and monitor the overall health of the population. Direct counts are not proposed but may be conducted at the discretion of the Habitat Biologist. Any other sensitive plant species observed during surveys for graceful tarplant will be recorded and future surveys and monitoring will include those species. In addition, an annual visual assessment of each population of sensitive species will be conducted during a regular maintenance event and will be compared to results from previous years in order to help track overall population trends.

**Table 2**  
**BLOOMING PERIODS\*/SURVEY SEASON**  
**FOR SENSITIVE PLANT SPECIES WITHIN THE BOS**

| Species  | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Graceful tarplant<br>( <i>Holocarpha</i><br><i>virgata</i> ssp.<br><i>elongata</i> ) |     |     |     |     | X   | X   | X   | X   | X   | X   | X   |     |

\*Blooming periods are from CNPS 2008.

### Fairy Shrimp Surveys

Presence/absence surveys for San Diego fairy shrimp will be conducted every 2 of 5 years during the wet season within appropriate habitat in the BOS. Although no sensitive plant species have

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been recorded in the vernal pools on site, the presence of little mouselink or any other sensitive vernal pool plants will also be recorded during these surveys.

### **Stephens' Kangaroo Rat Surveys**

Focused surveys for Stephens' kangaroo rat are not proposed.

### **Other Potential Surveys**

If burrowing owls are detected on site, the management plan will be revised to include yearly surveys for this species. A 1-day assessment/survey for burrowing owl would be conducted every year during the owl breeding season (February 1–August 31) within the BOS. If possible, the survey should be conducted during the peak of the breeding season (April 15–July 15). This survey would document all burrowing owl sightings, occupied burrows, young of the year, and burrows with owl sign observed on site, as well as presence/absence of ground squirrels. Any owls observed incidentally during surveys for other species also will be documented.

### **Exotic Plant Control**

The Resource Manager will coordinate with landowners adjacent to the BOS to provide information regarding exotic plant species and to increase the efficiency of exotic plant control programs. To accommodate changing growth patterns, weeding will occur as needed at the discretion of the Resource Manager. Weeding will occur by manual or mechanical means; no weed whips or chemical herbicides may be used unless specifically determined to be necessary by the Resource Manager. The Resource Manager is responsible for removal of species rated as High by the California Invasive Plant Council (Cal-IPC; 2006) within 2 weeks after discovery. Special attention will be paid to species such as artichoke thistle (*Cynara cardunculus*), milk thistle (*Silybum marianum*), Italian thistle (*Carduus pycnocephalus*), and fennel (*Foeniculum vulgare*), any of which can form dense local populations and drastically alter the composition of plant communities by outcompeting native species. Non-native grasses will not be prioritized for removal unless it is determined by the Resource Manager that they are significantly impacting a sensitive resource. General weeding events will occur twice annually: in January/February and April/May.

If the use of herbicide is deemed necessary, application should be minimal, and may only occur in compliance with all federal and state laws. Use of chemical herbicides should be determined in coordination with the County Department of Environmental Health. All herbicide use will be applied by backpack sprayers or stump painting directly on target weeds and will involve short duration, biodegradable chemicals.

### **Predator Control**

A moderate tolerance for pest species will be permitted, but if the Resource Manager determines that pest eradication measures (pesticide application or trapping) are required, the USFWS and/or CDFG will be contacted to determine the need and appropriate methods, including potentially hiring a licensed pest control advisor. Exotic species control/eradication programs

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should be implemented at the appropriate time of year depending on the pest species and field conditions, and should be coordinated with efforts on adjacent properties.

## **Fire and Flood Management**

Fire is an important element in the ecology of southern California but can also present potential hazards to habitat within the BOS. Following fire events, vegetation within the BOS will be allowed to recover naturally; however, seeding may be required at the discretion of the Resource Manager. Special attention to weed establishment following fire will be assessed by the Resource Manager.

Santa Maria Creek may flood during heavy rains. Such flooding could damage habitat within the BOS through scour, erosion, sedimentation, and spread of weeds. The Resource Manager will monitor habitat areas disturbed by flooding and implement remedial efforts as needed. Flood-damaged areas should be allowed to recover naturally; however, remedial measures, including erosion control, seeding, and/or planting of container stock, may be required if natural recovery is inadequate or if unstable conditions (e.g., slope undercutting) are created. The Resource Manager will remove any exotic species introduced during flooding events.

### **5.1.3 Management Constraints**

This RMP follows the regulatory and permitting requirements of the USFWS, CDFG, and County. Although it anticipates measures for most foreseeable contingencies, several external constraints remain. For example, environmental factors, such as prolonged drought, could have detrimental effects on sensitive plant populations within the BOS.

### **5.1.4 Adaptive Management**

If the findings of regularly scheduled habitat or species monitoring reveal that the goals of this RMP are not being met (i.e., loss of 1 or more sensitive species or habitats), an amendment to the plan may be necessary. Any changes to this plan will require approval by the appropriate agency (USFWS, CDFG, and/or the County).

## **5.2 CULTURAL RESOURCES ELEMENT**

### **5.2.1 Goals**

Any cultural resource sites located within the BOS must be preserved and maintained as they are discovered. Monitoring and general stewardship measures will be implemented to protect these resources.

### **5.2.2 Tasks**

#### **Monitoring**

Any cultural sites identified within the BOS will be monitored during site visits to ensure that no natural or human-induced impacts have occurred.

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## **Stewardship**

Avoidance is generally the best preservation method for cultural resources within an open space area; therefore, no signage will be installed drawing attention to any cultural sites that may be present within the preserve. If fencing is determined to be necessary based on site monitoring, the Resource Manager will be responsible for maintaining this fencing. The Resource Manager will also be responsible for removing any trash or debris that is found on or around any cultural sites.

### **5.2.3 Management Constraints**

No substantial management constraints are expected that may affect preservation of any cultural resources present within the BOS.

## **5.3 OPERATIONS, MAINTENANCE, AND ADMINISTRATION ELEMENT**

### **5.3.1 Goals**

Ongoing maintenance and administration, which will be the responsibility of the Resource Manager, will be conducted to ensure no loss of resource quality within the BOS.

### **5.3.2 Tasks**

The general operations, maintenance, and administrative tasks to be conducted by the Resource Manager will include the following tasks.

#### **Annual Monitoring Reports**

A letter report will be submitted to the USFWS, CDFG, and County that will summarize the overall condition of vegetation communities and sensitive species in the BOS, propose management tasks for the following year, and discuss results of management activities proposed in the previous report. Submitted annually by the end of January, this letter report will compare the most recent data with those collected in previous years, evaluate sensitive species status and local wildlife corridor use, and outline appropriate remedial measures. Fees for County review will also be included with submittal of the annual report.

The results of all updated vegetation mapping and sensitive plant and animal surveys should be included in the annual letter reports.

#### **Management Plan Review**

This RMP will be reviewed every 5 years to determine the need for revisions or updates. Due to changing conditions on site, it may be necessary to revise the tasks outlined in this plan to ensure continued success of the stated goals.

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## **Access Control**

To prevent human-induced degradation of the BOS due to illegal occupancy, trespassing (off-highway vehicle activity), removal of resources, or dumping of trash or debris, the Resource Manager will restrict access to the BOS. Permanent signage will be posted every 500 feet along the eastern boundary of the 63-acre parcel and at locations of any unauthorized trails entering the BOS and be maintained by the Resource Manager. All signs will be corrosion-resistant (e.g., steel), measure at minimum 6 by 9 inches in size, be posted on a metal post at least 3 feet above ground level, and provide notice in both Spanish and English that the area is an ecological preserve with trespassing prohibited. The signs will state the following:

### Sensitive Environmental Resources

Disturbance Beyond this Point is Restricted by Easement

### Contact Information:

County of San Diego Department of Planning and Land Use  
Ref. SPA04-006/TM5405RPL

## **Fencing**

Existing fencing will be maintained along the eastern boundary of the 63-acre parcel. Fencing will not be installed in other locations since remaining boundaries of the parcels are contiguous to other open space lands.

Additional fencing needs will be identified by the Resource Manager and a fencing plan will be submitted to the County for review prior to installation. Such fencing may be required for:

- Prevention of unauthorized vehicle access;
- Protection of open space boundaries (e.g., along utility easements);
- Prevention of trail formation within the preserve; and/or

## **Illegal Occupancy**

Illegal occupancy is common in open space areas, although this is not anticipated to be an issue on this site because of the open nature of the habitat. The Resource Manager will survey the BOS for evidence of illegal access concurrently with other site management activities and file a report with the Sheriff and the County DPLU, if necessary.

## **Removal of Resources**

Removal of any plants, animals, rocks, minerals, or other natural resources from the BOS is prohibited. The Resource Manager will maintain a log of illegal collecting and may report individuals caught removing natural resources from the BOS to the USFWS, CDFG, County, and/or Sheriff's Office. The Resource Manager may allow and supervise seed collection and plant cuttings as part of revegetation efforts within the preserve and/or in nearby areas. Any such collected plant materials should be limited to that necessary to ensure successful revegetation while not adversely affecting local plant populations.

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## **Maintain Confidentiality of Archaeological Site Locations**

Successful management of resources within the BOS will require maintenance of any known/discovered cultural resource sites. Due to the sensitive nature of cultural resources in general, the Resource Manager will maintain records of any known locations on site and ensure that they remain confidential.

## **Trash Removal and Vandalism Repair**

The Resource Manager will conduct general trash removal within the BOS during regular management site visits and any damage caused by vandalism will be repaired. Trash removal and vandalism repair will occur as needed during regular bi-monthly site visits.

## **Hazardous Materials Monitoring**

The release of hazardous materials such as fuels, oil, vegetation clippings, trash, and landscaping related chemicals (e.g., pesticides and herbicides) has potential to affect the BOS negatively. Although no specific survey will be conducted, if such hazardous materials are observed within the BOS during regular bi-monthly site visits, remedial measures to remove the material will occur.

## **5.4 PUBLIC USE ELEMENT**

The BOS will not have public trails or other facilities. The BOS is intended to serve as a habitat preserve and as such is not compatible with many activities. Activities that will be specifically prohibited include:

- Use of herbicides (except to remove non-native species as necessary), pesticides, biocides, fertilizers, or other agricultural chemicals,
- Weed abatement activities for fuel management or other incompatible fire protection activities,
- Use of OHVs and any other motorized vehicles except in the execution of management duties,
- Recreational activities including, but not limited to, horseback riding, biking, hunting, or fishing,
- Commercial or industrial uses,
- Construction, reconstruction or placement of any building or other improvement, billboard, or sign,
- Depositing or accumulation of soil, trash, ashes, refuse, waste, bio-solids or any other material,
- Planting, introduction or dispersal of non-native or exotic plant or animal species,
- Altering the general topography of the BOS, including but not limited to building of roads and flood control work,
- Removing, destroying, or cutting of trees, shrubs or other vegetation, except as required by federal, state or local law or by governmental order for (1) emergency fire breaks; (2) maintenance of existing foot trails or roads; (3) prevention or treatment of disease; or (4) required mitigation programs, and
- Manipulating, impounding or altering any natural watercourse, body of water or water circulation on the open space, and activities or uses detrimental to water quality, including but not limited to degradation or pollution of any surface or sub-surface waters.

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## 5.5 FIRE MANAGEMENT ELEMENT

A controlled burn of the site may be considered as part of the strategy intended to improve habitat for burrowing owl and Stephens' kangaroo rat. No other fire management activities (clearing, thinning, mowing, discing, blading, etc.) are planned within the BOS. All such measures to reduce wildfire risk are to occur entirely outside of the BOS.

## 6.0 RESOURCE MANAGEMENT PLAN SUMMARY AND BUDGET

### 6.1 OPERATIONS AND BUDGET SUMMARY

Table 3 provides a summary of all management tasks described above and the frequency of each task. The budget for these tasks will be provided in a PAR as an appendix to the final RMP after a Resource Manager is identified.

| <b>Table 3<br/>MANAGEMENT TASKS</b>                      |   |
|--|---|
| <b>TASK</b>  | <b>FREQUENCY</b>                        |
| <b>Biological Resources Tasks</b>                        |   |
| Baseline Inventory                                       | 1 time                                  |
| Update Biological Mapping                                | Every 5 years                           |
| Sensitive Plant Species Monitoring                       | 2 out of every 5 years                  |
| Burrowing Owl Surveys                                    | Every year (if present)                 |
| Fairy Shrimp Surveys                                     | 2 out of every 5 years                  |
| Exotic Plant Control                                     | As needed; anticipated 2 times per year |
| Predator Control   | As needed                               |
| Fire Management  | As needed                               |
| <b>Cultural Resources Tasks</b>                          |   |
| Monitoring   | Bi-Monthly (every other month)          |
| Stewardship  | Bi-Monthly (every other month)          |
| <b>Operations, Maintenance, and Administration Tasks</b> |   |
| Monitoring Reports                                       | Annually                                |
| Management Plan Review                                   | Every 5 years                           |
| Access Control   | Bi-Monthly (every other month)          |
| Maintain Confidentiality of Cultural Site Locations      | Ongoing                                 |
| Trash Removal and Vandalism Repair                       | Bi-Monthly (every other month)          |
| Hazardous Materials Monitoring                           | Bi-Monthly (every other month)          |

### 6.2 EXISTING STAFF AND ADDITIONAL PERSONNEL NEEDS SUMMARY

Staff and personnel needs will be provided in the final RMP after a Resource Manager is identified.

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## 7.0 LIST OF PREPARERS

The following individuals contributed to the preparation of this report.

|               |   |
|---------------|---|
| Ryan Burns    | M.S., Geography, San Diego State University, 2009<br>B.A., Geography, Eastern Kentucky University, 2006   |
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\*Primary report author

†County-approved Biological Consultant

## 8.0 REFERENCES

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## APPENDIX A

### SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR

**Appendix A**  
**SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR**  
**MARTZ CONSERVATION PARCEL**

| SPECIES  | LISTING OR SENSITIVITY*  | POTENTIAL TO OCCUR  |
|--|--|---|
| Parish's brittlescale<br>( <i>Atriplex parishii</i> )                              | --/--<br>CNPS List 4.3<br>County Group A   | Low to moderate. Occurs in chenopod scrub, vernal pools, playas, and on alkaline flats on the periphery of salt pannes. Known in California from only three occurrences in Riverside and San Diego counties, one of which occurred southeast of the site. |
| Thread-leaved brodiaea<br>( <i>Brodiaea filifolia</i> )                            | FT/SE<br>CNPS List 1B.1<br>CA Endemic;<br>County Group A;<br>County MSCP<br>Narrow Endemic | Moderate. Found on clay soils in vernal moist grasslands and vernal pool periphery are typical locales.   |
| Southern tarplant<br>( <i>Centromadia parryi</i> ssp.<br><i>australis</i> )        | --/--<br>CNPS List 1B.1<br>County Group A  | Moderate. Occurs in seasonally moist (saline) grasslands, alkaline locales, and along edges of salt marshes.  |
| Vernal barley<br>( <i>Hordeum intercedens</i> )                                    | --/--<br>CNPS List 3.2<br>County Group C   | Moderate. Occurs in saline flats and depressions in grasslands or in vernal pool basins.  |
| Little mouseltail<br>( <i>Myosurus minimus</i> ssp.<br><i>apus</i> )               | --/--<br>CNPS List 3.1<br>County Group A   | High. Occurs in vernal pools and alkaline marshes. This cryptic species typically grows in the deeper portions of vernal pool basins, sprouting immediately after the surface water has evaporated. Has been documented in the site vicinity.             |
| Spreading navarretia<br>( <i>Navarretia fossalis</i> )                             | FT/--<br>CNPS List 1B.1<br>County Group A  | Moderate. Vernal pool species with limited number of populations.   |
| California Orcutt grass<br>( <i>Orcuttia californica</i> )                         | FE/SE<br>CNPS List 1B.1<br>County Group A<br>MSCP Covered                                  | Low. Vernal pool species. Would have been observed if present.  |
| San Diego button-celery<br>( <i>Eryngium aristulatum</i> var.<br><i>parishii</i> ) | FE/SE<br>CNPS List 1B.1<br>County Group A<br>MSCP Covered                                  | Low. Perennial herb occurring in coastal scrub, grassland, marsh, vernal pools, and in mesic soils along the coast. Range includes Riverside and San Diego counties and Baja. Would have been observed if present.  |
| San Diego thorn-mint<br>( <i>Acanthomintha ilicifolia</i> )                        | FT/SE<br>CNPS List 1B.1<br>MSCP NE<br>County Group A                                       | Low. Occurs on clay lenses in open areas within grasslands. Would have been observed if present.  |

**Appendix A (cont.)**  
**SENSITIVE PLANT SPECIES WITH POTENTIAL TO OCCUR**  
**MARTZ CONSERVATION PARCEL**

| SPECIES   | LISTING OR SENSITIVITY*                              | POTENTIAL TO OCCUR   |
|---|--|--|
| San Diego ambrosia<br>( <i>Ambrosia pumila</i> )  | FE/--<br>CNPS List 1B.1<br>MSCP NE<br>County Group A | Low. Occurs in disturbed areas within chaparral, coastal sage scrub, and grasslands. Would have been observed if present.                                |
| Orcutt's brodiaea<br>( <i>Brodiaea orcuttii</i> ) | --/--<br>CNPS List 1B.1<br>County Group A            | Low. Occurs in vernal pools and ephemeral streams and seeps in Riverside and San Bernardino counties south to Baja. Would have been observed if present. |

\*Refer to Appendix C for a listing and explanation of status and sensitivity codes

## APPENDIX B

### SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR

**Appendix B**  
**SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR**  
**MARTZ CONSERVATION PARCEL**

| SPECIES  | STATUS*                                  | POTENTIAL/HABITAT  |
|--|--|--|
| <b>VERTEBRATES</b>   |  |  |
| <b>Amphibian</b>   |  |  |
| Arroyo toad<br>( <i>Bufo californicus</i> )                              | FE/SSC<br>MSCP Covered<br>County Group 1 | High for burrowing. Found on streambanks with open-canopy riparian forest characterized by willows, cottonwoods, or sycamores; breeds in areas with shallow, slowly moving streams, but burrows in adjacent uplands during dry months  |
| <b>Reptiles</b>  |  |  |
| Silvery legless lizard<br>( <i>Anniella pulchra pulchra</i> )            | --/SSC<br>County Group 2                 | Low. Occurs in areas with loose soil, particularly in sand dunes and or otherwise sandy soil. Generally found in leaf litter, under rocks, logs, or driftwood in oak woodland, chaparral, and desert scrub.  |
| Orange-throated whiptail<br>( <i>Cnemidophorus hyperthrus beldingi</i> ) | --/SSC<br>MSCP Covered<br>County Group 2 | Low. Coastal sage scrub, chaparral, edges of riparian woodlands, and washes. Also found in weedy, disturbed areas adjacent to these habitats. Important habitat requirements include open, sunny areas, shaded areas, and abundant insect prey base, particularly termites ( <i>Reticulitermes</i> sp.). |
| Coastal western whiptail<br>( <i>Cnemidophorus tigris stejnegeri</i> )   | --/SSC<br>County Group 2                 | Low. Open coastal sage scrub, chaparral, and woodlands. Frequently found along the edges of dirt roads traversing its habitats. Important habitat components include open, sunny areas, shrub cover with accumulated leaf litter, and an abundance of insects, spiders, or scorpions.                    |
| San Diego banded gecko<br>( <i>Coleonyx variegatus abbotti</i> )         | --/--<br>County Group 1                  | Low. Chaparral and coastal sage scrub in areas with rock outcrops.   |
| Red-diamond rattlesnake<br>( <i>Crotalus exsul</i> )                     | --/SSC<br>County Group 2                 | Moderate. Found in chaparral, coastal sage scrub, along creek banks, particularly among rock outcrops or piles of debris with a supply of burrowing rodents for prey. May use rock outcrops located on site.   |
| San Diego ringneck snake<br>( <i>Diadophis punctatus similis</i> )       | --/--<br>County Group 2                  | Low to moderate. Generally occurs in moist habitats such as oak woodlands and canyon bottoms, but is also sometimes encountered in grassland, chaparral, and coastal sage scrub.   |
| Coastal rosy boa<br>( <i>Lichanura trivirgata roseofusca</i> )           | --/--<br>County Group 2                  | Moderate. Occurs among rocky outcrops in coastal sage scrub, chaparral, and desert scrub.  |
| Coast patch-nosed snake<br>( <i>Salvadora hexalepis virgultea</i> )      | --/SSC<br>County Group 2                 | Low. Primarily found in chaparral but also inhabits coastal sage scrub and areas of grassland mixed with scrub.  |



Appendix B (cont.)  
SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR  
MARTZ CONSERVATION PARCEL

| SPECIES   | STATUS*  | POTENTIAL/HABITAT  |
|---|--|--|
| <b>VERTEBRATES (cont.)</b>  |  |  |
| <b>Reptiles (cont.)</b>   |  |  |
| Two-striped garter snake<br>( <i>Thamnophis hammondi</i> )                            | --/SSC<br>County Group 1                                     | Moderate near vernal pool habitats. Occurs along permanent and intermittent streams bordered by dense riparian vegetation, but occasionally associated with vernal pools or stock ponds.   |
| <b>Birds</b>  |  |  |
| Cooper's hawk<br>( <i>Accipiter cooperii</i> )  | --/SSC<br>MSCP Covered<br>County Group 1                     | Low. Oak groves, mature riparian woodlands, and eucalyptus stands or other mature forests.   |
| Tricolor blackbird<br>( <i>Agelaius tricolor</i> )                                    | BCC/SSC<br>MSCP Rare, NE;<br>MSCP Covered<br>County Group 1  | Moderate as a winter visitor and as a migrant. Found in marsh habitat near grasslands, pastures, and agricultural fields.  |
| Southern California rufous-crowned sparrow<br>( <i>Aimophila ruficeps canescens</i> ) | --/WL<br>MSCP Covered<br>County Group 1                      | Low to moderate. Found in coastal sage scrub and open chaparral as well as shrubby grasslands.   |
| Golden eagle<br>( <i>Aquila chrysaetos</i> )  | BCC/SSC<br>Fully Protected<br>MSCP Covered<br>County Group 1 | Moderate to forage in open or shrubby habitats. Tends to require places of solitude and is usually found at a distance from human habitation.  |
| Red-shouldered hawk<br>( <i>Buteo lineatus</i> )                                      | --/--<br>County Group 1                                      | Low. Riparian woodland, oak woodland, orchards, eucalyptus groves, or other areas with tall trees.   |
| Mountain plover<br>( <i>Charadrius montanus</i> )                                     | BCC/SSC<br>MSCP Covered<br>County Group 2                    | Low. A rare visitor to San Diego County during winter, found in short-statured grasslands and fields.  |
| Northern harrier<br>( <i>Circus cyaneus</i> )   | --/SSC<br>MSCP Covered<br>County Group 1                     | High to forage; moderate to nest. Found in open grassland and marsh habitat.   |
| White-tailed kite<br>( <i>Elanus leucurus</i> )                                       | --/Fully<br>Protected<br>County Group 1                      | Moderate to high for foraging. Found in riparian woodlands and oak or sycamore groves adjacent to grassland.   |
| Merlin<br>( <i>Falco columbarius</i> )  | --/SSC<br>County Group 2                                     | Moderate. Usually observed in grasslands but can occur in any habitat except dense woodlands.  |
| Prairie falcon<br>( <i>Falco mexicanus</i> )  | BCC/WL<br>County Group 1                                     | Moderate to high for foraging. Observed year-round in San Diego County but more commonly during winter. Nesting occurs on cliff or bluff ledges or occasionally in old hawk or raven nests; foraging occurs in grassland or desert habitats. |
| Loggerhead shrike<br>( <i>Lanius ludovicianus</i> )                                   | BCC/SSC<br>County Group 1                                    | High for foraging. Found in grassland, open sage scrub, chaparral, and desert scrub.   |

Appendix B (cont.)  
**SENSITIVE ANIMAL SPECIES WITH POTENTIAL TO OCCUR  
MARTZ CONSERVATION PARCEL**

| SPECIES   | STATUS*                                  | POTENTIAL/HABITAT   |
|---|--|---|
| <b>VERTEBRATES (cont.)</b>  |  |   |
| <b>Mammals</b>  |  |   |
| Pallid bat<br>( <i>Antrozous pallidus</i> )                           | --/SSC<br>County Group 2                 | Low to moderate for foraging. Deserts and canyons. In daytime roosts in buildings, crevices; less often in caves, mines, hollow trees, and other shelters.                              |
| Dulzura pocket mouse<br>( <i>Chaetodipus californicus femoralis</i> ) | --/SSC<br>County Group 2                 | Low. Primarily associated with mature chaparral. It has, however, been trapped in mule fat scrub and is known to occur in coastal sage scrub.   |
| Mountain lion<br>( <i>Felis concolor</i> )                            | --/--<br>MSCP Covered<br>County Group 2  | Low. In the West, generally found in mountainous, semi-arid terrain.  |
| Western red bat<br>( <i>Lasiurus blossevillei</i> )                   | --/SSC<br>County Group 2                 | Moderate. Day roosts are commonly in edge habitats adjacent to streams or open fields, in orchards, and sometimes in urban areas. Possible association with intact riparian habitat.    |
| San Diego desert woodrat<br>( <i>Neotoma lepida intermedia</i> )      | --/SSC<br>County Group 2                 | Low to moderate around rock outcrops. Typically found in open chaparral and coastal sage scrub, often building large, stick nests in rock outcrops or around clumps of cactus or yucca. |
| Small-footed myotis<br>( <i>Myotis ciliolabrum</i> )                  | --/--<br>County Group 2                  | Moderate. Found in arid and shortgrass prairie regions, cliffs, talus, or clay buttes or riverbeds in prairie areas.  |
| American badger<br>( <i>Taxidea taxus</i> )                           | --/SSC<br>MSCP Covered<br>County Group 2 | High. Found in open plains and prairies, farmland, and sometimes edges of woods.  |

\*Refer to Appendix C for a listing and explanation of status and sensitivity codes

## APPENDIX C

### EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

**Appendix C**  
**EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES**

**FEDERAL, STATE, AND LOCAL CODES**

**U.S. Fish and Wildlife Service (USFWS)**

|     |                               |
|-----|-------------------------------|
| FE  | Federally listed endangered   |
| FT  | Federally listed threatened   |
| BCC | Birds of Conservation Concern |

**California Department of Fish and Game (CDFG)**

|     |                                  |
|-----|----------------------------------|
| SE  | State listed endangered          |
| ST  | State listed threatened          |
| SR  | State listed rare                |
| SSC | State species of special concern |
| WL  | Watch list                       |

Fully Protected      Fully Protected species may not be taken or possessed without a permit from the Fish and Game Commission and/or CDFG.

**County of San Diego**

**Plant sensitivity:**

|         |  |
|---------|--|
| Group A | Plants rare, threatened or endangered in California or elsewhere                         |
| Group B | Plants rare, threatened or endangered in California but more common elsewhere            |
| Group C | Plants that may be quite rare, but more information is needed to determine rarity status |
| Group D | Plants of limited distribution and are uncommon, but not presently rare or endangered    |

**OTHER CODES AND ACRONYMS**

**Multiple Species Conservation Program (MSCP) Covered**

Multiple Species Conservation Program covered species for which the County has take authorization within MSCP area.

**MSCP Narrow Endemic (NE) Species**

Some native species, primarily plants with restricted geographic distributions, soil affinities, and/or habitats, are referred to as narrow endemic species. For vernal pools and identified narrow endemic species, jurisdictions will specify measures in their respective subarea plans to ensure that impacts to these resources are avoided to the maximum extent practicable.

Appendix C (cont.)  
EXPLANATION OF STATUS CODES FOR PLANT AND ANIMAL SPECIES

California Native Plant Society (CNPS) Codes

**Lists**

- 1A = Presumed extinct.
- 1B = Rare, threatened, or endangered in California and elsewhere. Eligible for state listing.
- 2 = Rare, threatened, or endangered in California but more common elsewhere. Eligible for state listing.
- 3 = Distribution, endangerment, ecology, and/or taxonomic information needed. Some eligible for state listing.
- 4 = A watch list for species of limited distribution. Needs monitoring for changes in population status. Few (if any) eligible for state listing.

**List/Threat Code Extensions**

- .1 = Seriously endangered in California (over 80 percent of occurrences threatened/high degree and immediacy of threat)
- .2 = Fairly endangered in California (20 to 80 percent occurrences threatened)
- .3 = Not very endangered in California (less than 20 percent of occurrences threatened, or no current threats known)

A CA Endemic entry corresponds to those taxa that only occur in California.

All List 1A (presumed extinct in California) and some List 3 (need more information; a review list) plants lacking threat information receive no threat code extension. Threat Code guidelines represent only a starting point in threat level assessment. Other factors, such as habitat vulnerability and specificity, distribution, and condition of occurrences, are considered in setting the Threat Code.